IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appln No. : 10/594,096

Confirm. No.: 8903

Applicant(s): Yasushi OKUBO et al

Filed : September 25, 2006

For : TRANSPARENT CONDUCTIVE FILM ...

Art Unit : 1785

Examiner : Gerard T. Higgins

Docket No. : 06660/HG

Express Mail Mailing Label
No.: EM 445 766 597 US
Date of Deposit: June 9, 2010

I hereby certify that this paper is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA.22313-1450

Susan Gillen

Susan Gillen

In the event that this Paper is late filed, and the necessary petition for extension of time is not filed concurrently herewith, please consider this as a Petition for the requisite extension of time, and to the extent not tendered by payment attached hereto, authorization to charge the extension fee, or any other fee required in connection with this Paper to Account No. 06-1378.

PRE-APPEAL BRIEF CONFERENCE REQUEST

MAIL STOP AF
COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, VA 22313-1450

S I R :

This request is being filed with a Notice of Appeal.

Review of the Rejection in the above-identified application is respectfully requested for the reasons set forth on the following five pages of explanation.

Filed herewith: Notice of Appeal and Fee

Claims 1, 4, 18 and 19 are rejected over Sakai et al (JP 10-309770) in view of Yuasa et al (JP 2000-192246) and applicant's admission. Claims 7 and 8 are rejected for the same reasons over Sakai in view of Yuasa and further in view of Ito (JP 2008-303520).

The transparent conductive film as claimed in claim 1 requires that a gas barrier layer and a transparent conductive layer be provided in that order on one of two surfaces of a transparent plastic film. In addition, the refractive index of the gas barrier layer decreases from the transparent conductive layer to the transparent plastic film; and the refractive index decreases across the claimed conductive film.

The Examiner relies on Sakai as the primary reference for teaching, at paragraph [0048], that the transparent conductive film may have the layers of the order of:

plastic film/barrier layer/transparent conductive layer.

Sakai is also relied on as describing the refractive index range of 147-1.51 at [0016]. Applicants "admission" also describes refractive indexes. However, this is a permissible range not a gradient. Nowhere does Sakai alone or in combination with the other art or "admissions" show or suggest the required

element of a gradient as detailed above and required in the claims. Therefore the Examiner has failed to support a prima facia obviousness rejection.

Furthermore, the refractive index gradient could not be obvious from the art. The object of Sakai is to provide a transparent conductive film having a chemical resistive property, a high gas barrier property and a high rigidity comparable to a glass substrate [0008]. Within this object, Sakai does not show or suggest or need to obtain an organic EL element emitting high luminance by using a transparent conductive film having the claimed refractive index gradient property (See Claim 1 and page 16, lines 8-17 of the present application specification).

In other words, even if Sakai discloses a permissible refractive index range, Sakai does not describe or suggest a gradient or a function for the refractive index gradient required by the present invention object. Sakai does not support the effects obtained by the structures having the refractive index inside of gas barrier layer and the refractive index of whole transparent conductive film as shown above (in Fig. A) and required by Claim 1 (and therefore, all of the claims). Therefore, there is no reason to look to Sakai for a solution to

the objects of the present invention or to modify or optimize the Sakai teaching as required, to render the present claims obvious. And, there is no reason to expect success for the present invention objects.

The additional art combined with Sakai, does not provide the missing teaching detailed above.

Yuasa is cited by the Examiner to teach varying silicon dioxide and titanium dioxide within a functionally gradient optical film. The Examiner refers to [0012], [0035] and]0069] at page 4, line 15. This does not provide missing teachings, especially the refractive index gradients, detailed above, or the motivation or otherwise establish a function for the parameters of the present invention so that one would modify Sakai to meet the present invention requirement or expect that meeting the refractive index requirements would be successful in meeting the invention objects. Nor does the "admission of a refractive index. Also, in view of the different objects, there is no basis to combine Yuasa with Sakai.

Ito is cited to teach a transparent conducting film. It is also directed to a different object than Sakai and would not be obviously combinable with Sakai. Even when combined with Sakai

and the other cited art, it does not provide the missing motivation to modify the parameters as required for the present invention objects. Also, it does not recognize the effect of having refractive index gradients required by the present claims, and combining its teaching with the other art does not bridge the missing teaching detailed above.

The Examiner considers it obvious to select teaching out of context and combine references because they are all dealing with optical materials. The Examiner's rejection includes that the Examiner "clearly envisages using the resin of Formula(2) by itself to form a sheet" and that the "sheet will have an index of refraction of 1.47 - 1.51." Even if the Examiner's "envisages" are probative, this is a range of possible refractive indices, not a teaching of the required refractive index gradients. Further, Sakai has different and non-analogous property requirements than the present invention as discussed above. None of the art recognizes the importance of the claimed parameters for the refractive indexes and the manner in which they are required to vary. Therefore one would not look to Sakai even if it did have relevant teaching when combined with the other art; and even when combining, the result does not show or suggest the

present invention required gradients as claimed, or provide a reasonable expectation of success when the gradient requirements are met.

With respect to the requirement of a gradient, the Examiner states that one would obviously know to match refractive indexes to reduce thermal stress. There is no evidence of record that this is correct. Furthermore, "refractive index" is not the same as "coefficient of thermal expansion." Therefore there is no basis for the Examiner's conclusion that matching "refractive indexes" would reduce thermal stress. Even if the Examiner was correct, for the present invention object very specific refractive index gradients are required by claim 1 and therefore the Examiner's unsupported assertion would not render the refractive index gradients required in claim 1, obvious.

In view of the above, the rejections are not supported by the prior art teaching. Reversal of the rejections and allowance are respectfully requested.

Respectfully submitted,

Frishauf, Holtz, Goodman
& Chick, P.C.
220 Fifth Ave., 16th Floor
New York, NY 10001-7708
Tel. No.: (212) 319-4900
Fax No.: (212) 319-5101
MJC:sg

MARSHALL J. CHICK
Reg. No. 26,853